What is GAIN?

The Global Aviation Information Network is an industry-led international coalition of airlines, manufacturers, employee groups, governments and other aviation organizations formed to promote and facilitate the voluntary collection and sharing of safety information by and among users in the international aviation community to improve aviation safety.

The GAIN concept was proposed in May 1996 as a way to significantly improve aviation safety through the enhanced use of safety information. The GAIN philosophy is that the voluntary collection, analysis, and sharing of safety information using advanced technologies in a jeopardy-free environment will illuminate safety concerns and permit identification and implementation of cost-effective mitigations.

Who Participates in GAIN?

Nearly 700 aviation safety professionals from 37 countries have participated in the GAIN program since its inception in 1996. Organizations participating in GAIN include airlines, airframe manufacturers, avionics and safety software developers, employee groups (pilots, mechanics, air traffic controllers, and flight attendants), civil aviation authorities, accident investigation boards, aviation trade associations, military aviation, and university groups involved in aviation safety.

How is GAIN Organized?

The GAIN organization consists of the Steering Committee, Working Groups, Program Office, and a Government Support Team:

The **Steering Committee** sets high-level GAIN policy, issues the GAIN Action Plan to direct the Working Groups, and guides the Program Office. The Committee meets on a quarterly basis and is chaired by Dr. Steve Predmore, Vice President of Safety at JetBlue Airlines. The following industry stakeholders are represented on the Steering Committee:

- Airbus
- Alaska Airlines
- Alitalia
- Air Line Pilots Association
- Air Transport Association of America
- American Airlines
- The Boeing Company
- British Airways
- Federal Aviation Administration
  (ex officio member)
- Flight Safety Foundation

- Helicopter Association International
- International Air Transport Association
- International Association of Machinists
- Japan Airlines
- JetBlue Airlines
- Middle East Airlines
- National Business Aviation Association
- National Air Traffic Controller Association
- Regional Airline Association
- U.S. military aviation

The **Working Groups** are interdisciplinary industry/government teams that work GAIN issues in a largely autonomous fashion to accomplish the Action Plans established for them by the Steering Committee. Working Groups are discussed further below.

The **Program Office** provides technical and administrative support to the Steering Committee, Working Groups, and the Government Support Team.

The **Government Support Team (GST)** consists of invited representatives from government organizations who work together to facilitate the voluntary, non-punitive collection and sharing of safety information, reduce legal and organizational barriers to that collection and sharing, and encourage government organizations to support the development and implementation of GAIN. Since its formation in late 2000, the GST has created two reports: *Reducing Legal Impediments to Collecting and Sharing Safety Information* and *Initial List of Major Current or Planned Government Aviation Safety Information Collection Programs.*

What is a GAIN World Conference?

GAIN World Conferences bring together aviation safety professionals from around the world, present the latest GAIN products, discuss recent developments relating to aviation safety information, and discuss ideas for future GAIN activities. The first five conferences were held in Cambridge, Massachusetts (October 1996), London (May 1997), Long Beach, California (November 1998), Paris (June 2000), and Miami (December 2001). The theme of the latest conference, attended by 173 aviation safety professionals representing 96 organizations from 19 countries, was "Safety Information Sharing: Collaboration, Innovation, Implementation." The next GAIN World Conference will be held in Europe in June 2003.

What are the activities of the GAIN Working Groups?

Four GAIN Working Groups (WGs) accomplish the work of GAIN by establishing and carrying out Work Plans for tasks contained in the GAIN Action Plan. Each WG meets every 2 to 3 months to report and assess progress on tasks assigned to individual members and exchange ideas. A summary of the status and plans of working group activities is briefed at each Steering Committee meeting.

The accomplishments and proposed tasks for the GAIN WGs are as follows:

> **WG A: Aviation Operator Safety Practices** assists aviation operators in obtaining, implementing and sharing industry "best practices." WG A has developed the *Operator's Flight Safety Handbook (OFSH)* to help operators start, improve, or expand their internal safety programs, and the *Cabin Safety Compendium (CSC)* to give airlines access to "best practices" in the area of cabin safety. Over 2,300 OFSH CDs have been distributed to industry and government organizations, and the CSC has been distributed via the Internet to over 400 individuals. During the past year, the working group completed Issue 2 of the OFSH, and released Spanish-language and Japanese-language versions of and OFSH, which were translated by industry aviation organizations. In 2002, WG A is expecting to work on a second edition of the CSC and will be addressing ramp safety and/or maintenance safety.
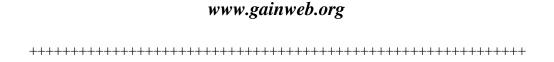
WG B: Analytical Methods and Tools fosters the use of existing analytical methods and tools and the development of new tools. WG B has documented analytical processes and requirements for airline flight safety management. The group developed and conducted a three-stage review of promising analytical tools for Relevance & Maturity, Value, and Operational Readiness which included partnering on some tools with airlines to review tool usefulness and usability. The findings from this work were compiled in the *Guide to Methods and Tools for Airline Flight Safety Analysis,* which contains summaries of approximately 50 methods and tools. In 2002, WG B plans to continue partner with airlines to learn more about their analysis of safety information and to demonstrate new techniques such as data mining and/or text mining; explore issues involved in linking and merging data in airline internal safety data ba ses (e.g. FOQA and ASAP); and expand activities to address tools for air traffic system safety.

WG C: Global Information Sharing Prototypes promotes and facilitates the development and implementation of systems to support the global sharing of aviation safety information. WG C has gathered requirements from airlines and helped to develop two prototype systems for exchanging airline safety event reports among trusted groups in near-real time. Information on these sharing systems is contained in the *Interim Report on Near-Real Time Airline Safety Event Sharing System Prototypes*. In 2002, WG C plans to facilitate operational demonstrations of the prototype sharing systems to document usability and safety value and develop a standard or operating protocol for sharing airline safety event information. Other tasks will include promoting various "automated" aviation safety information sharing activities around the world and facilitate development of a system to share safety lessons learned and corrective actions with flight operations personnel.

WG E: Flt Ops/ATC Ops Safety Information Sharing is a newly formed working group dedicated to fostering the increased collaboration on safety information exchange between flight operations and air traffic operations. WG E is working to identify and document current programs that are encouraging such collaboration, develop guidelines for establishing such programs, and promote the sharing of lessons learned. The group will also study ways to promote a non-punitive reporting environment to improve Flt Ops/ATC Ops collaboration and work to ensure confidentiality in the sharing process.

How Can I Participate in GAIN?

The prospects for GAIN in the coming year and beyond are very exciting. The various areas of concentration within the GAIN Program offer many challenging and rewarding opportunities for involvement. Volunteers from all aspects of the aviation safety community are encouraged to participate in any GAIN Working Group of interest. Participation can include attending Working Group meetings (held every 2 or 3 months), contributing ideas or requirements by e-mails (if travel is not easy), and/or working on or reviewing Working Group projects and products. Interested parties can add their name to the GAIN contact list and sign up for a GAIN Working group, as well as find additional information about the GAIN program, at the GAIN web site:

www.gainweb.org

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